

Claims

1. A blind rivet assembly comprising:
a tubular shank;
a radially outwardly extending flange at one end of the shank;
a stem extending through the shank and having a head situated adjacent the end of the shank remote from the flange; and
the flange including an undercut surface facing towards the end of the shank remote from the flange.
2. A blind rivet assembly according to claim 1, wherein the stem extends through the shank, and the head is positioned outside the shank.
3. A blind rivet assembly according to claim 1, wherein the head is positioned within a portion of the shank having an enlarged bore, at its end remote from the flange.
4. A blind rivet assembly according to claim 1, wherein the flange is circular in outline and the undercut surface is a conical edge surface of the flange.
5. A blind rivet assembly according to claim 1, wherein the flange has a peripheral rebate at its edge adjacent the shank.
6. A blind rivet assembly according to claim 5, wherein the peripheral rebate is formed by a recess in the edge region of the flange.

7. A blind rivet assembly according to claim 5, wherein the peripheral rebate is formed by a spacer component positioned in contact with the surface of the flange adjacent the shank, the spacer component having an outer diameter less than the diameter of the undersurface of the shank.
8. A blind rivet assembly according to claim 5, wherein the peripheral rebate is formed by a dished edge region of the flange.
9. A blind rivet assembly according to claim 1, further including a cap, wherein the cap is provided with a cavity for receiving the flange of the blind rivet assembly after setting, the cavity having an opening and an undercut surface surrounding the opening, the undercut surface of the cap being resiliently engageable with the undercut surface of the flange of the blind rivet assembly to retain the flange of the blind rivet assembly within the cavity.
10. A cap for use with a blind rivet assembly according to claim 1, the cap being formed from resilient material and comprising a cavity for accommodating the flange, the cavity comprising an undercut surface engageable with the undercut surface of the flange to retain the flange in the cavity.
11. A cap according to claim 10, further comprising a securing formation for attaching a further component to the cap.
12. A cap according to claim 11, wherein the securing formation comprises a pair of spaced resilient cantilever arms with opposed enlargements adjacent their free ends.
13. A cap according to claim 11, wherein the securing formation is a pipe clamp.

14. A cap according to claim 11, wherein the securing formation comprises a pair of flexible strap elements attached to the cap at one of their respective ends, the other ends of the strap elements being formed with complementary parts of a securing device for attaching the strap elements together.

15. A cap according to claim 11, wherein the securing formation is a cable tie.

16. A cap according to claim 10, further comprising a vent bore providing fluid communication between the cavity and a surface of the cap opposite the opening.

17. A cap according to claim 16, further comprising a filter mesh in the vent bore.

18. A method of attaching a second component to a fabrication comprising sheet material, comprising the steps of:

providing aligned holes in two portions of sheet material;

joining the sheet material portions by setting rivets in the aligned holes, the rivets comprising a tubular shank having a radially outwardly extending flange at one end and a stem extending through the shank from a head situated adjacent the end of the shank remote from the flange and the flange including an undercut surface facing towards the end of the shank remote from the flange;

providing a second component with a cavity for receiving the flange of a rivet assembly after setting, the cavity having an opening and an undercut surface surrounding the opening; and

resiliently engaging the undercut surface of the flange of the rivet assembly and the undercut surface of the cavity to retain the second component to the flange.